

s/n 10/689,392
221-0074US

REMARKS

The Office Action rejected claim 5 under 112, first paragraph, as failing to comply with the written description requirement. The Office Action contends that the claim limitation that the first and second metal seals are machined into the body of the seal carrier is not supported by the specification which discloses the first and second seals machined in the body of the seal retainer.

However, claim 5 does require the first and second metal seals to be machined into the body of the seal retainer. Claim 5 is to a two-piece seal retainer comprised of an outer shell and an inner seal carrier. Since the inner seal carrier is a part of the seal retainer, it is submitted that the metal seals recited in claim 5 are, if fact, machined into the body of the seal retainer. This two-piece configuration is fully supported by the drawing figures. Moreover, the written description, at paragraph [00010], states:

As shown in FIG. 1, in a first embodiment, seal retainer 10 comprises shell 21 and seal carrier 30, with central bore 20 extending therethrough. The seal carrier fits together with the shell to form the seal retainer that may be inserted and removed from a female undersea hydraulic coupling member.

It is therefore submitted that claim 5 is fully supported by the written description.

The Office Action rejected claims 1 – 8 and 11 – 16 under 103(a) as being unpatentable over U.S. Patent No. 5,015,016 (Smith016) in view of U.S. Patent No. 3,142,498 (Press). The Office Action contends that Smith016 discloses a seal retainer 22 that comprises a first metal seal 15 and a second metal seal 55. The Office Action further contends that element 29 of Smith016 is an inner seal carrier.

Claim 1 is to a seal retainer having integral metal seals. Sleeve member 22 of Smith016 has no integral seals of any type. See the exploded view of Figure 3. All the sealing elements of Smith016 (V-shaped seal 15, axial soft seals 26 & 27 and metal C-seal 55) are separate pieces – not integral with sleeve 22.

Element 29 of Smith016 is not an “inner seal carrier” – it carries no seals. “The V-seal 15 is retained on the seal seat 65 with a nut 29 or retaining clip. The nut may be threaded onto mating threads 30 in the internal bore 61 of sleeve member 22.

s/n 10/689,392
221-0074US

Alternatively, the clip may be secured with a clip groove in the internal bore (not shown)." [col. 6; lines 52-57]

The Office Action also contends that Press teaches a lip seal and a retainer with the lip seal integral with the body of the retainer.

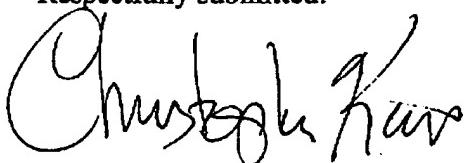
The swivel joint assembly of Press has no retainer.

Press describes a non-separable pipe joint wherein the ends of the pipe themselves are formed into male and female members which are held together by flanged nut 17. See Figure 1. Those skilled in the art will appreciate that a seal retainer requires both sealing engagement with the male member and with the body of the female member. But Press has only a single lip seal. The joint assembly of Press requires only a single seal because there is no separate retainer (which would require sealing to the opposing member).

Accordingly, there is no motivation for one skilled in the art to combine the teachings of Smith016 and Press to reach the claimed invention.

For the reasons set forth above, it is submitted that claim 5 is supported by the written description and that claims 1 – 8 and 11 – 16 are not obvious over the combination of the cited references. Reconsideration of the rejections is requested.

Respectfully submitted:



Christopher D. Keirs
Reg. No. 32,248
Attorney for Applicant(s)
Wong Cabello Lutsch Rutherford & Bruculeri LLP
20333 State Hwy. 249 Suite 600
Houston, TX 77070
832 446-2406
Fax: 832 446-2424
ckeirs@counselip.com